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**Controlling Pregnancy:
Fred Lyman Adair and the Influence of
Eugenics on the Development of Prenatal Care**

A Thesis Submitted to the
Yale University School of Medicine
In Partial Fulfillment of the Requirements for the
Degree of Doctor of Medicine

By
Florence Hsiao
Class of 2019

Abstract

This thesis examines the development of prenatal care in the United States in the early 1900s by focusing on the life and career of Fred Lyman Adair who, as an obstetrician and eugenicist, played a significant role in shaping prenatal care into what it is today. Although prenatal care was a product of infant welfare activists and public health officials, obstetricians like Adair who struggled to establish obstetrics as a legitimate specialty, saw an opportunity in prenatal care to pathologize pregnancy and elevate their specialty. Adair, therefore, became one of the foremost champions of prenatal care, and helped to standardize prenatal care as a physician-centric service through his influence on medical education and public policy, thereby increasing medical control over pregnancy. However, an analysis of Adair's professional writings demonstrated that, for Adair, medical control of pregnancy served a larger eugenic purpose. Eugenic notions of "race betterment" and prevention of "race suicide" for white Americans permeated his writings and motivated his vision for prenatal care as a eugenic tool. Historians have often cited eugenic control of reproduction as a cause of racial disparity in reproductive health today. Similarly, Adair's eugenic vision of prenatal care perhaps had long-lasting consequences and may help explain present-day disparities in maternal and infant mortality rates between African Americans and whites.

Acknowledgements

There are number of people I would like to thank without whom this thesis would not have been possible. First and foremost, I would like to express my sincerest gratitude to my thesis advisor, Professor Naomi Rogers, for her continual guidance, enthusiasm and encouragement throughout the entire thesis process. Her depth and breadth of knowledge and wisdom allowed me to dive for the first time into the world of medical history without fear. I am also grateful to Melissa Grady who spent the time to teach me how to navigate the immensely intimidating medical library, both physical and virtual. She was somehow always able to help me find exactly what I needed.

I would also like to thank those who have helped me make it this far in my journey towards an M.D.; my spiritual family at ECV, for taking care of my soul; my parents, for all their sacrifices and endless support; and my husband, for putting up with me when I was stressed and for being my best friend.

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Introduction

Prenatal care is one of the most widely recommended and frequently used health services in the United States with over 18 million prenatal visits each year.¹ Since prenatal care first developed in the early 1900s, the medical community has viewed it as one of the most effective ways to prevent pregnancy complications. Prenatal care is now considered an essential health service, universally covered under the Affordable Care Act.² However, despite widespread acceptance of prenatal care, scientific evidence regarding its effectiveness has been largely equivocal. In fact, in the United States, even though there are more prenatal monitoring options and medical interventions available than ever before and the cost of providing prenatal care has increased exponentially compared to peer countries, infant mortality remains high and maternal mortality is on the rise.³ Consequently, prenatal care has come under scrutiny in recent years.

The troubling evidence of worsening pregnancy-related morbidity and mortality suggests that perhaps prenatal care does not fully deliver the benefits it promises, so how did a medical service that lacks supportive evidence become so ubiquitous? In order to address this question, this thesis traces the history of prenatal care back to when it first developed in the early 1900s with a particular focus on the life and career of the “father of modern prenatal care,” Dr. Fred Lyman Adair. While most medical services arose from scientific or medical discoveries, this was not the case for prenatal care. Instead, prenatal care was the product of the professional, political,

¹ Michelle J.K. Osterman and Joyce A. Martin, “Timing and Adequacy of Prenatal Care in the United States, 2016,” *National Vital Statistics Reports* 67, no. 3 (May 30, 2018): 1–13.

² Rebekah E. Gee, Barbara Levy, and Carolina Reyes, “Health Reform in Action: Updates on Implementation of the Affordable Care Act,” *Obstetrics and Gynecology* 123, no. 4 (2014): 869–73.

³ GBD 2015 Maternal Mortality Collaborators, “Global, Regional, and National Levels of Maternal Mortality, 1990–2015: A Systematic Analysis for the Global Burden of Disease Study 2015,” *The Lancet* 388 (October 8, 2016): 1775–1812.

and social context in which it developed, largely due to the influence of Adair who was an obstetrician and a eugenicist. By investigating the roots of prenatal care, I attempt to reveal the motivations and ideologies that conceived the systems and structures that form the basis of prenatal care today.

An exploration of the history of prenatal care must begin with a brief look into the care pregnant women prior to the turn of the century. Up until the early 1900s, pregnancy was viewed as a normal, physiologic process that did not require medical attention. Women usually looked to female friends and relatives for support and advice that often came from personal experiences and generational wisdom.⁴ The closest precursor to prenatal care likely comes from the practice of midwives. At the turn of the century, over 50% of women in the United States were delivered by midwives with up to 90% of all women in immigrant, rural, and southern black communities. While doctors often lived miles away and were largely inaccessible especially in rural areas, midwives were typically a member of the woman's community.

Research on midwives in the United States before the 1900s focused primarily on midwifery practices during childbirth with limited investigation of midwife's role during pregnancy, which varied widely between cultural groups. Ethnographic research investigating the practices of African American midwives and immigrant midwives suggests that midwives were likely to be closely involved in a woman's early stages of pregnancy. Drawing on the stories of African American midwives in the south, Gertrude Fraser noted that "A midwife was in close contact with her potential clients, as members of the same church congregation, as neighbors, and as kin. At the time that a woman became pregnant, she already had extensive interaction

⁴ Judy Barrett Litoff, "Forgotten Women: American Midwives at the Turn of the Twentieth Century," *The Historian* 40, no. 2 (February 1978): 235-51.

with her midwife in situations not directly connected to childbirth.” The close relationship between the midwife and pregnant woman meant that midwives often went beyond just being a birth attendant. The midwife would visit a pregnant woman periodically, providing meals and housekeeping services both before and after birth.⁵ The communal experience of pregnancy among women before the 1900s starkly contrasted the limited medicalized prenatal care delivered by white male doctors at the turn of the century.

The fundamental shift from pregnancy as a normal, female-driven experience to one that required medical supervision by a physician can in part be attributed to the creation of prenatal care in the early 1900s. Chapter 1 of this thesis examines this shift through the early years of Fred Adair’s career as well as the professional, political, and social forces that shaped his involvement in prenatal care. More specifically, I argue that the beginning of prenatal care was influenced by three major movements at the turn of the century– the medicalization of childbirth, the infant welfare movement, and the eugenics movement. While it was the infant welfare activists in Boston who spearheaded one of the first prenatal programs in the United States, they were not the only ones interested in prenatal care. Obstetricians, eager to elevate the legitimacy of their specialty, saw an opportunity to educate women about the dangers of pregnancy and the need for a physician. Moreover, eugenicists who were alarmed about the low birth rate and the high infant mortality rates among “native” whites of the country, endorsed prenatal care as a means of preserving this population and combating “race suicide.”

Chapter 2 explores Adair’s influence in both promoting prenatal care at a national level and bringing prenatal care under the control of physicians during the 1920s and 1930s. This

⁵ Gertrude Jacinta Fraser, *African American Midwifery in the South: Dialogues of Birth, Race, and Memory* (Cambridge: Harvard University Press, 1998), 214.

chapter focuses on the impact of the Sheppard-Towner Act of 1921, which not only provided federal funding for prenatal care, but also accentuated the deepening schism between public health and organized medicine. In opposition to increasing government involvement in health care, Adair worked to retain physician control of prenatal care through his leadership in the Joint Committee on Maternal Welfare. Adair further solidified the obstetrician's authority over pregnancy and childbirth in the 1930s by helping to establish the American Board of Obstetrics and Gynecology, which dramatically improved obstetrical training at medical schools. Additionally, he formed the American Committee on Maternal Welfare, which played a significant role in publicizing medicalized prenatal care and physician attended childbirth.

Finally, chapter 3 takes a closer look at Adair as a eugenicist and his vision of shaping prenatal care into a eugenic tool. Eugenicists in the first half of the twentieth century pushed for ways to regulate reproduction in the name of "race betterment." This included negative eugenic strategies like sterilization that prevented the reproduction of the "unfit" and positive eugenic propaganda that encouraged the reproduction of the "fit." A survey of Adair's writings reveal that Adair strongly ascribed to eugenic ideologies and drew on the language of positive eugenics to promote prenatal care. Moreover, he advocated for preconceptional care, an extension of prenatal care that allowed physicians to judge the physical and hereditary fitness of potential parents. By tying prenatal care to eugenics, Adair put forth a vision of prenatal care that placed the white physician at the forefront of "racial progress."

The story of the birth of modern prenatal care was one of promise, power, and prejudice. While intended to help prevent infant and maternal mortality and morbidity, prenatal care was also about giving physicians more control over pregnancy and childbirth and a means of

regulating the fertility of the “unfit” and promoting the reproduction of the “fit.” By examining the man who shaped prenatal care and the context in which it developed provides, one can gain a more holistic understanding of the origins of prenatal care. While this thesis by no means attempts to offer a solution for the present state of maternity care in the United States, my hope is that it will raise new questions and provide new directions for what prenatal care can be for all women in this country.

Chapter 1: The Birth of Modern Prenatal Care

The birth of modern prenatal care in the United States is inextricably tied to the life and career of Fred Lyman Adair (1877-1972), a physician who became one of the foremost champions of prenatal care while in its nascent stages and was later described as “the father of modern prenatal care.”⁶ Prior to Adair’s efforts, prenatal care remained a fringe and haphazard endeavor practiced by mostly public health nurses in a few cities. After Adair, prenatal care became an integral fixture of modern obstetrics, and even became a matter of national concern. The requirement – taken for granted in obstetrics practices of today – that every pregnant mother receives the care and attention of a licensed physician and the wealth of federal policies governing maternal and child health in the United States owe their origins to Adair’s vision for the care of pregnancy and the birthing process in modern America.

Prenatal care did not dominate Adair’s career, though it certainly was its culmination. In fact, as demonstrated by the hundreds of articles that Adair published in a number of major

⁶ Arthur B. Hunt, “Every Man’s Legacy: Presidential Address.,” *American Journal of Obstetrics and Gynecology* 76, no. 2 (1958): 235–42.

academic journals, his interest in prenatal care did not fully develop until 1918 when he was forty and well into his medical career. However, a deeper understanding of his approach to prenatal care hinges on understanding the formative earlier years of his career when he was not writing explicitly about prenatal care. Those years, the first two decades of the 20th century, were crucial moments in the history of American medicine, moments which spanned the birth of modern obstetrics as a legitimized and official specialty within medicine, the national infant welfare movement in response to the discovery of the country's high infant mortality rates, and the torrential rise of eugenics as a force in American science and culture. Together, these moments provide a foundation for understanding the work and influence of Adair in making prenatal care as we know it today.

Adair grew up under idyllic circumstances. Born in rural Iowa, Adair was the only child of Dr. Lyman Adair, the town physician, and Sarah Jennings Adair, a teacher. His childhood memories were filled with images of farms, horses, and games, but what ultimately established the trajectory of his life was through his relationship with his father who Adair described as “a parent devoted to his profession and to the service of mankind.”⁷ Following in his father's footsteps, Adair graduated from Rush Medical College in 1901 at the age of 24, and then completed two internship years in Chicago. His ambitions quickly outgrew his humble beginnings and against the expectations of friends and family, he did not take over his father's practice in rural Iowa but moved to Minneapolis where he believed there were more opportunities for him to advance his career. He quickly made a name for himself and soon after

⁷ Fred Lyman Adair, *The Country Doctor and the Specialist* (Adair Award Fund, 1968), 46.

starting a private practice in Minneapolis, the University of Minnesota invited him to be an instructor at the College of Medicine and Surgery in 1906.⁸

Although Adair began his career as a generalist, his desire was to specialize. At the turn of the century, the burgeoning of medical knowledge as well as the technological and scientific advancements led to the creation of medical specialists. Although no formal specialty licensing board existed yet, specialists were accorded more prestige and, therefore, an increasing number of physicians actively chose to narrow their scope of practice.⁹ In his autobiography, Adair noticed a hint of regret in his father who had “thoughts of moving to a larger town, and of specializing in orthopedics.” This, Adair saw, was “prophetic of the changes that were to take place in the medical profession in the century that had just opened.”¹⁰ Adair knew that the road to becoming a leader in medicine required specialization.

Adair’s choice of specialty was not immediately apparent. His interest in children’s health and mentorship from pediatricians led him to initially pursue pediatrics. However, because there were no openings at the University of Minnesota at the time he started working there, he shifted his focus. In 1908, he did what many physicians searching for specialist training did – he traveled to Berlin, which was considered the epicenter of medical knowledge and advancement.¹¹ There he worked under Dr. Robert Meyer, the head of the laboratory in the women’s clinic at the Berlin Charité, studying cervical erosion healing. Upon his return a year later, he made the decision to limit his practice to “obstetrical cases and diseases of women.”¹² Perhaps due to his

⁸ Jay Arthur Myers, *Masters of Medicine: An Historical Sketch of the College of Medicine, University of Minnesota, 1909-1966* (St. Louis: Warren H. Green, 1968), 338.

⁹ George Weisz, *Divide and Conquer: A Comparative History of Medical Specialization* (New York City: Oxford University Press, 2006), 173.

¹⁰ Fred Lyman Adair, *The Country Doctor and the Specialist* (Adair Award Fund, 1968), 64.

¹¹ Weisz, *Divide and Conquer: A Comparative History of Medical Specialization*, 52-60.

¹² Adair, 65.

continued interest in pediatrics, Adair focused much of his energy on obstetrics, which afforded him a way to indirectly study pediatrics but still establish a promising specialized career.

Even in the early stages of his career, Adair's ambition and proclivity for leadership was evident. Soon after specializing, Adair became the Chief of the Department of Obstetrics and Gynecology at Minneapolis City Hospital. Then in 1913, he was promoted to a faculty position and elected unanimously by the medical faculty to serve on the administrative board at the University of Minnesota.¹³ In his position on the board, Adair played a significant role in reorganizing the medical school and helped propel the School of Medicine to become one of the leading medical institutions in the country. Adair's leadership and administrative abilities won him many accolades, and according to Dr. Jay Arthur Myers, his colleagues "held such extreme confidence in Dr. Adair that he was appointed to membership or chairmanship of some of the most important committees."¹⁴ His leadership and academic achievements were also recognized nationally. In 1915, he was elected to the membership of the prestigious and exclusive American Gynecological Society.¹⁵ Adair was a natural-born leader with ambition and organizational gifts, which he would later put to use as an advocate for prenatal care and founder of some of the most influential national obstetrics and gynecology organizations.

Pathologizing Childbirth and the Rise of Obstetrics

Despite Adair's success in establishing himself as a respected obstetrician, the early 1900s was a tenuous time for the field. Adair's choice of specialty was not a popular one among his

¹³ Myers, *Masters of Medicine: An Historical Sketch of the College of Medicine, University of Minnesota, 1909-1966*.

¹⁴ Myers, 100.

¹⁵ LeRoy Broun, ed., *Album of the Fellows of the American Gynecological Society, 1876-1917* (Philadelphia: WM J. Dornan, 1918), p. 24.

colleagues. In fact, when he made the decision to specialize in 1909, he was the only physician in Minneapolis to become an obstetrical and gynecologic specialist. Reflecting on his choice of specialty, Adair wrote in his autobiography, "Some of my friends in the profession advised me against taking such a step. I was aware of the financial risk involved."¹⁶ Although Adair did not elaborate on the "risks," it was no secret that the career of an obstetrician, in particular, was far less financially lucrative than other specialties. This was in large part due to the fact that most women at the time chose to hire the services of a midwife rather than pay the high fees of a doctor. Obstetrics also lacked support within the medical community. Medical schools provided little to no obstetrical training, and consequently, medical students often graduated with no exposure to labor and delivery.¹⁷ Unrecognized by many in their profession and underappreciated by the public, obstetricians evidently did not enjoy the same kind of prestige and respect that their colleagues in other specialties received.

All of this would change during Adair's career. At the turn of the century, obstetricians began to campaign for the "dignity" of their specialty, and there was no voice more influential and impassioned than Dr. Joseph Bolivar DeLee, one of Adair's most revered mentors and colleagues. Described as a "pioneering obstetrician," DeLee was perhaps best known as the founder of the Chicago Lying-In Hospital in 1895 where he offered charity care to poor pregnant women and taught medical students. At around the time Adair specialized, DeLee was a rising star in the field. A prolific publisher and innovative surgeon, DeLee became known for his novel, albeit controversial, obstetrical techniques such as the prophylactic forceps operation, a

¹⁶ Adair, 65.

¹⁷ Williams, J. Whitridge. "Medical education and the midwife problem in the United States." *Journal of the American Medical Association* 58, no. 1 (1912): 1-7.

highly invasive procedure that included the use of ether anesthesia followed by episiotomy and delivery by forceps.¹⁸

In fighting for the dignity of obstetrics, DeLee targeted midwives. According to DeLee, midwives were not only direct economic competition, but also the primary reason for the low esteem of obstetrics. DeLee often placed the blame on the public stating, “A community that tolerates the midwife tolerates low obstetric ideals. If midwives are allowed by the state and the public to practice the art of obstetrics, will any physician consider it as high, as difficult as it really is? Does the obstetrician receive the same dignity as the surgeon?”¹⁹ In other words, as long as the public believed that the midwife and obstetrician were interchangeable, then obstetrics would never be held in high regard. DeLee described the midwife as “a relic of barbarism” and set physicians against midwives by stating that, “If the doctors recognized the dignity of obstetrics, [the midwife] could not exist.”²⁰ DeLee’s writings were persuasive and many of his colleagues who shared his views also contributed numerous articles on the “midwife problem.” Even those who sympathized with midwives and recognized the need for their work in rural areas, qualified their position by describing the midwife as a “necessary evil.”²¹ Many historians have credited DeLee with the eventual dissolution of midwifery in the first few decades of the twentieth century.²²

¹⁸ Lewis, Carolyn Herbst. "The Gospel of Good Obstetrics: Joseph Bolivar DeLee's Vision for Childbirth in the United States." *Social History of Medicine* 29, no. 1 (2015): 112-130.

¹⁹ Joseph B DeLee, “Operative Obstetrics,” in *Obstetrics*, vol. 7, 10 vols., The Practical Medicine Series (Chicago: The Year Book Publishers, 1914), 154.

²⁰ Joseph B DeLee, “Progress Toward Ideal Obstetrics,” *The American Journal of Obstetrics and Diseases of Women and Children* 73, no. 3 (1916): 407-15.

²¹ George W. Kosmak, “Discussion,” *The American Journal of Obstetrics and Diseases of Women and Children* 76, no. 2 (August 1917): 320-21.

²² Judy Barrett Litoff, *American Midwives: 1860 to Present* (Greenwood Press, 1978), 70.

DeLee may have used such strong language against midwives because he lacked the evidence to back up his claims. He believed that the only way to reduce mortality and morbidity related to childbirth was through obstetrical techniques and science, but his belief was not supported by statistical data. Maternal and infant mortality rates among physicians were often higher than among midwives. In fact, many historians agree that physicians' interventionist techniques "created new problems for birthing women and actually increased the dangers of childbirth."²³ Physicians were also known to have contributed to high rates of puerperal fever because they carried infectious diseases from other patients to the mother.²⁴ In a paper entitled "Progress Toward Ideal Obstetrics," DeLee recognized this troubling evidence. Yet, his response to such concerns was that for the sake of advancing obstetrics and improving childbirth for the future, "it is worthwhile to sacrifice everything, including human life, to accomplish the ideal."²⁵

DeLee recognized that in order to "accomplish the ideal," there needed to be a fundamental shift in the cultural perception of labor and delivery. Prior to the turn of the century, pregnancy and childbirth were considered to be a normal, physiologic process. Therefore, pregnant women saw no need to seek the services of a physician, and the medical profession had little interest in getting involved. DeLee, therefore, set out to reverse these long-held beliefs. In a textbook on obstetrics by DeLee, he included the following note:

Labor today in our over-civilized women is no longer a normal function but is distinctly pathologic and pathogenic... If the process is pathologic it will have greater dignity. If it has dignity great medical minds will turn to it to solve its problems and great men will

²³ Judith Walzer Leavitt, *Brought to Bed: Childbearing in America, 1750 to 1950* (Oxford University Press, 2016), 57.

²⁴ Judith Walzer Leavitt, "'Science' Enters the Birthing Room: Obstetrics in America since the Eighteenth Century," *The Journal of American History* 70, no. 2 (September 1983): 281–304.

²⁵ DeLee, "Progress Toward Ideal Obstetrics," 411.

want to practice the art. The State will not allow midwives and medical students to assume the heavy responsibilities of caring for a pathologic function, and the standard of practice will be raised.²⁶

For DeLee, this emphasis on the pathologic nature of childbirth served two purposes: increase the dignity of obstetrics among medical professionals which would result in more research and funding; and eliminate the work of midwives as the public demand of obstetrical care increased. In order to put this belief into practice, he urged his colleagues and students to “regard every woman as abnormal until [the physician] has proved the opposite.”²⁷

Although DeLee’s writings rarely addressed pregnancy, other obstetricians including Adair extended the pathology of childbirth to include pregnancy as well. This idea was first propagated by Scottish physician, John William Ballantyne, who was the founder of the field of antenatal pathology. He wrote an article in 1901 entitled “A Plea for a Pro-Maternity Hospital” in which he described his vision of a hospital for pregnant women that would not only help ensure the health of the fetus, but more importantly, allow for the study of fetal pathology.²⁸ In the United States, the pathology of pregnancy was popularized by Dr. John Whitridge Williams, the author of the most influential and authoritative textbook on obstetrics, *Williams Obstetrics*. In it, Williams stated that despite pregnancy being a normal occurrence in a woman’s life, “it is apparent that the border-line between health and disease is less distinctly marked during gestation, and derangements... may readily give rise to pathological conditions which seriously

²⁶ Joseph B DeLee, “Pathology of Pregnancy,” in *Obstetrics*, vol. 7, 10 vols., The Practical Medicine Series (Chicago: The Year Book Publishers, 1910), 15.

²⁷ DeLee, 15.

²⁸ J. W. Ballantyne, “A Plea for a Pro-Maternity Hospital,” *British Medical Journal* 1, no. 2101 (April 6, 1901): 813–14.

threaten the life of the mother or child, or both.”²⁹ This provided the basis for medicalized prenatal care and justified the physician’s as well as the patient’s belief that women needed close medical supervision throughout pregnancy.

Perhaps more importantly, prenatal care served a pragmatic purpose as an effective propaganda tool for obstetricians. Early renditions of prenatal care as administered by public health nurses during the first decade of the 20th century, were primarily educational. Nurses instructed women about diet and exercise and warned them about the dangers of childbirth and the superstitions of midwives.³⁰ By doing so, nurses helped to spread the word about the need for medical care during pregnancy and childbirth. Consequently, prenatal care also helped to divert business away from midwives and toward the doctor. A New York obstetrician, Dr. Ira Hill, in recognizing the business value of prenatal care stated that “the importance of obstetric care will be realized as education on this subject is spread. [The obstetrician] will be called on to give more of his time and he will be paid for it.”³¹ As far as the physician was concerned, prenatal care served two primary purposes – it educated women about the problems of pregnancy and childbirth and offered them the solution of obstetrical care.

As Adair worked to establish himself as an obstetrician-gynecologist during the early years of his career, he was undoubtedly immersed in these field-defining conversations. He was likely strongly influenced by DeLee’s views considering he later worked directly with DeLee and then succeeded him as the second chairman of the Department of Obstetrics and Gynecology at

²⁹ J. Whitridge Williams, “The Management of Normal Pregnant,” in *Obstetrics: A Textbook for the Use of Students and Practitioners*, Second (New York: Appleton and Company, 1910), 199.

³⁰ Marika Seigel, *The Rhetoric of Pregnancy* (University of Chicago Press, 2013), 53.

³¹ Ira L. Hill, “Extending the Care of Pregnancy,” *The Journal of the American Medical Association* 71, no. 11 (September 14, 1918): 885–87.

the University of Chicago in 1929.³² When DeLee died in 1942, Adair delivered his eulogy in which he described DeLee as “one of the greatest obstetrical leaders of the country, not only in our time but in all of history.”³³ Thus, Adair’s perspective of his own profession was shaped by obstetric leaders like DeLee whose crusade against midwives and campaign for pathologizing childbirth were a reflection of an insecure profession attempting to find its place in the existing medical establishment. Driven by these views, Adair would later help elevate the status of the obstetrician at the national level through his physician-centric model of prenatal care.

Infant Welfare Movement and the Birth of Prenatal Care

Prenatal care, though it became an integral part of obstetrics, was not the direct product of medical or scientific advancements. In fact, it initially developed out of a larger national movement that took place during the Progressive Era in early 1900s America – the infant welfare movement. In the late 1800s, the United States experienced rapid urbanization, industrialization, and immigration. As the population of cities skyrocketed, new social, environmental, and health problems resulted in rising infant mortality rates. In a *New York Times* editorial published on July 19th, 1876, the writer lamented, “There is no more depressing feature about our American cities than the annual slaughter of little children... Last week there died every day in New York about one hundred babes under one year old. This is a monstrous and inexcusable sacrifice of infant life.”³⁴ It was evident that life in overcrowded cities was

³² Adair, *The Country Doctor and the Specialist*, 85-87.

³³ “Medicine: Death of DeLee,” *TIME Magazine*, April 20, 1942, <http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=54831307&site=ehost-live&scope=site>.

³⁴ Quoted in Richard A. Meckel, *Save the Babies: American Public Health Reform and the Prevention of Infant Mortality, 1850-1929* (University of Michigan Press, 1998), 11. Original quote from “Editorial,” *New York Times*, July 19, 1876.

particularly harsh on the country's youngest citizens, which sparked widespread social activism and political reform. In the early 1900s, the infant mortality rate began to be used as a surrogate marker for the country's level of civilization. Therefore, alarmed that the United States was ranked 18th for highest infant mortality rate on a list of 30 countries, national leaders and politicians began to take interest.³⁵

Policy reforms regarding infant welfare began with environmental and sanitation policies and later progressed to addressing the individual directly. Historian Richard Meckel divided the infant welfare movement into three main stages. The first stage, lasting from 1850 to 1880, focused on improving sanitation and squalid living conditions in cities. This was followed by the second stage which took place from 1880 to 1900 when attention was turned to infant nutrition. Scientific advances in the field of bacteriology led to the discovery of high concentrations of bacteria in commercial milk, so activists campaigned for government regulations on milk quality. By the early 1900s, infant welfare activists noticed that although infant mortality under one year of age decreased dramatically, mortality under one month of age remained exceptionally high. Obstetricians attributed most neonatal deaths either to birth injuries secondary to poor obstetrical technique caused by untrained midwives or to inadequate delivery planning resulting in emergency deliveries. This realization led to the third stage, which occurred from around 1900 to 1930 when prenatal care became the centerpiece of the movement.³⁶

³⁵ Jeffrey P. Brosco, "The Early History of the Infant Mortality Rate in America: 'A Reflection Upon the Past and a Prophecy of the Future,'" *Pediatrics* 103, no. 2 (February 1999): 478–85.

³⁶ Meckel, *Save the Babies: American Public Health Reform and the Prevention of Infant Mortality, 1850-1929*, 5-11.

The inception of prenatal care primarily stemmed from the work of Elizabeth Lowell Putnam, a Boston infant welfare activist who by the turn of the century had already made a name for herself in the campaign for pure milk. Starting in 1906, registered patients at the Boston Lying-In Hospital received a single nurse's visit to help the physician plan for deliveries. In 1909, Putnam decided to expand the nursing visit program and spearheaded the first systematized prenatal care program in the United States. The program involved a nurse who would visit the homes of registered patients of the Boston Lying-In Hospital every ten days as soon as the woman was confirmed to be pregnant. In order to prevent pregnancy complications, the nurses were trained to measure blood pressure, check the urine for protein, and report anything abnormal to the hospital. Although visiting nurses provided some medical services, the prenatal care program was still primarily educational. The nurses also "supplied the mother with much useful information with which young doctors were not familiar" by providing practical advice on topics like diet, exercise, and clothing.³⁷

Within the first three years of instituting the program, Putnam reported promising results. In an article in *The New England Journal of Medicine* in 1912, the Women's Municipal League of Boston reported the following data collected from over 1,000 cases:

Percentage of cases with threatened eclampsia³⁸:

First year – 10.2%

Second year – 4.8%

Last half year – 0.4%

Cases where eclampsia developed – 0³⁹

³⁷ Quoted in Marika Seigel, *The Rhetoric of Pregnancy* (University of Chicago Press, 2013), 52-53.

³⁸ Now referred to as preeclampsia

³⁹ A. B. Emmons, "Care of Pregnant Women," *Boston Medical and Surgical Journal* 166, no. 8 (February 22, 1912), 292.

Although it was unclear how these rates compared to the city at large over the same time period, the medical community deemed Putnam's experimental prenatal care system a success.

Obstetrician, A. B. Emmons, stated that her work had "demonstrated the value of prenatal care and is stimulating others in the field."⁴⁰ As a result, social welfare and municipal health organizations began to form all over the country with the expressed goal of providing prenatal care.⁴¹

Putnam's success resulted in her being recognized as a national leader in the infant welfare movement. She was appointed as one of the directors of the American Association for the Study and Prevention of Infant Mortality (AASPIM) in 1911 and later elected as the organization's president in 1917. AASPIM, which initially formed in 1910 following the first national conference on the prevention of infant mortality organized by the American Academy of Medicine, transformed the uncoordinated and disjointed efforts of local health departments, activists, and volunteer agencies into a national movement.⁴² Putnam's leadership in AASPIM placed prenatal care at the forefront of the national infant welfare movement. Within AASPIM's section on Nursing and Social Work in 1911, members passed a resolution urging that prenatal instruction and supervision be made an integral part of infant welfare station work. Putnam's influence also extended beyond the organization as she also served as an advisor to national policymakers including the first director of the United States Children's Bureau, Julia Lathrop.⁴³

⁴⁰ Emmons, 292.

⁴¹ Meckel, *Save the Babies: American Public Health Reform and the Prevention of Infant Mortality, 1850-1929*, 235.

⁴² Meckel, 109.

⁴³ Michel, Sonya, and Robyn Rosen. "The Paradox of Maternalism: Elizabeth Lowell Putnam and the American Welfare State." *Gender & History* 4, no. 3 (1992): 364-386.

The infant welfare movement provided the social and political foundation for establishing prenatal care. Many obstetricians in AASPIM actively promoted prenatal care including Adair who was a member of AASPIM since 1912 and later elected as vice president in 1921.⁴⁴ However, at this point, prenatal care programs were largely educational initiatives under the direction of local public health boards with physicians as just one of the many stakeholders involved. While Adair recognized the value and need for collaboration between various fields through national organizations like AASPIM, he would later become the driving force in ensuring that physicians become the primary leaders in prenatal care.

Eugenic Support of the Infant Welfare Movement

Interwoven within the infant welfare movement was the contemporaneous American eugenics movement, which was gaining political and scientific traction at the turn of the century. In fact, AASPIM had strong eugenic ties. AASPIM's annual conferences regularly included a eugenics section featuring papers written by prominent eugenicists of the day including Paul Popenoe, a biologist who was known as the first eugenic marriage counselor, and Henry Goddard, a psychologist who studied the heredity of "feeble-mindedness" and was the first to introduce the term "moron" for clinical use.⁴⁵ Perhaps the most notable participant was Harry Laughlin, a national leader in the eugenics movement who played a critical role in establishing compulsory sterilization and anti-immigration laws throughout the country. He was invited to the 1913 AASPIM conference where he spoke on the importance of understanding infant

⁴⁴ The American Association for the Study and Prevention of Infant Mortality changed its name to the American Child Hygiene Association in 1918.

⁴⁵ "Officers and Directors," in *Transactions of the American Association for Study and Prevention of Infant Mortality of the Third Annual Meeting* (Baltimore: The Franklin Printing Co., 1913), 3-7.

mortality from the standpoint of heredity since “the differential survival of infants is a genetic factor... and is, therefore, a proper subject for eugenic investigation.”⁴⁶ Given the memberships and contributions of eugenicists in AASPIM, Adair and other prenatal care advocates were undoubtedly not only influenced by eugenic ideas, but actively supported them.

Eugenicists’ interest in infant mortality, however, was not motivated by compassion for the helpless, but rather by a fear of “race suicide.” At the turn of the century, eugenicists were alarmed by the fact that the declining birth rate in the United States was only a problem among the higher classes of society. It was thought that rapid modernization and increasing comforts and luxuries were leading well-off white women to become more independent, marry at a later age, and use contraception. To eugenicists, this kind of behavior went against the laws of natural selection and placed the “fit,” or in this case, the “native white population” at risk of race suicide.⁴⁷ Investigations on race suicide by eugenicists often compared the low birth rate of native whites to the high birth rates of African Americans and immigrant whites illustrating eugenicists’ fear that native whites would soon be outnumbered by less desirable races.⁴⁸ The concept of “race suicide” was first described by sociologist Edward A. Ross in 1901 but was popularized by Theodore Roosevelt who warned that “the American stock is being cursed with the curse of sterility, and it is earning the curse, because the sterility is willful.” Such “willful sterility,” he deemed a “racial crime.”⁴⁹

⁴⁶ Harry H. Laughlin, “Eugenics and Infant Mortality,” in *Transactions of the American Association on the Study and Prevention of Infant Mortality of the Third Annual Meeting* (Baltimore: The Franklin Printing Co., 1913), 150–53.

⁴⁷ Allison Berg, *Mothering the Race: Women’s Narratives on Reproduction, 1890-1930* (Urbana and Chicago: University of Illinois Press, 2002), 5.

⁴⁸ Walter F. Willcox, “Differential Fecundity,” *The Journal of Heredity* 5, no. 4 (April 1914): 141–48.

⁴⁹ Theodore Roosevelt, “Race Decadence,” *The Outlook: A Weekly Newspaper* 97 (April 8, 1911): 763–69.

According to eugenicists, the differential birth rate made American society susceptible to racial degeneration. Of even greater concern was the fact that even within the white race, the low birth rate differentially affected “the better stocks more generally than the poorer... This would be to add to race suicide the evils of racial decay and degeneration.”⁵⁰ Because of the declining birth rate among “superior groups,” the high birth rate among “lesser” and “degenerate” groups like the promiscuous and “feeble-minded,” meant worsening racial degeneration. At the first AASPIM conference in 1910, Dr. Prince Morrow described child welfare in terms of racial degeneration,

“The alcoholic, the consumptive, the syphilitic, the idiot each reproduce his own kind. When the public is sufficiently educated to a knowledge of the fact that much of the disease, degeneracy and waste of child life is due to transmitted tendencies, public sentiment will demand the exclusion from marriage and parentage of certain types, the reproduction of which leads to the degeneration of the race.”⁵¹

By linking the differential birth rate and racial degeneration to infant mortality, Morrow regarded eugenics as a necessary part of any infant welfare program.

The tactics that eugenicists utilized in order to combat race suicide and racial degeneration fell into two categories – negative eugenics and positive eugenics. Negative eugenics involved preventing the unfit from reproducing through policies like compulsory sterilization of criminals, feeble-minded, and anyone who was considered “degenerate.” Positive eugenics was a more passive approach of educating and encouraging those in “superior groups” to have children. For many of the eugenicists who attended the AASPIM conferences, both

⁵⁰ F. H. Hankins, “The Declining Birth Rate,” *The Journal of Heredity* 5, no. 8 (August 1914): 361–67.

⁵¹ Prince A. Morrow, “Eugenics and Child Welfare,” *Transactions of the American Association on the Study and Prevention of Infant Mortality* 1 (1910): 136–43.

strategies were essential, but they recognized that the prevention of infant mortality was a necessary supplement to positive eugenic measures. In other words, in order to offset the declining birth rate, the children who are born should be protected. In the *Boston Medical and Surgical Journal* in 1915, an article commenting on the declining birth rate noted that civilization inevitably led to “constant elimination of higher types” and concluded, “To decrease the infant death-rate remains at present our most effective method to offset the menace of a declining birth-rate.”⁵² In other words, according to eugenicists, one of the best immediate solutions to the declining birth rate was to prevent infant mortality.

Yet, preventing infant mortality was not universally accepted by eugenicists. In fact, the eugenicists involved in AASPIM found themselves frequently defending their agenda to their colleagues who viewed prevention of infant mortality as anti-eugenic and “a perversion of medical science... that interferes with the law of natural selection; that by efforts to keep the feeble alive, degeneration of the race rather than improvement in it is favored.”⁵³ Eugenicists in AASPIM argued that equally important as heredity was the concept of eugenics, which focused on environmental factors of improving the human race. Dr. Emmett Holt, for example, argued that “a high infant mortality results in a sacrifice of the *unfortunate*, not the *unfit*.”⁵⁴ While infant welfare activists did not deny that heredity could play a role in infant mortality, they claimed that both eugenic and eugenics required equal consideration because the environment indiscriminately impacted the fit and the unfit. This sentiment was echoed by one of the first

⁵² Robert M. Green, “The Menace of a Declining Birth-Rate,” *The Boston Medical and Surgical Journal* 173, no. 14 (September 30, 1915): 517.

⁵³ L. Emmett Holt, “Infant Mortality, Ancient and Modern: An Historical Sketch,” in *Transactions of the American Association on the Study and Prevention of Infant Mortality* (Baltimore: Franklin Printing Co., 1914), 24–54.

⁵⁴ Holt, 25.

directors of AASPIM, Irving Fisher, a professor of economics at Yale and founder of the American Eugenics Society. In his opening address at the first AASPIM conference, Fisher responded to anti-eugenic criticisms by saying that prevention of infant mortality was simply “to give back to the baby what is the baby’s natural birthright, namely, pure milk and pure air.”⁵⁵

Similarly, prenatal care advocates felt the need to demonstrate that prenatal care was in line with the eugenic agenda. According to Mrs. Max West, a member of AASPIM and the author of the Children’s Bureau publication of *Prenatal Care* in 1913, the fundamental purpose of prenatal care was to reduce the number of “puny, ill-conditioned babies” who not only “crowd our welfare stations and hospitals” but may also “live on dragging out enfeebled existence possibly becoming the progenitors of weaklings like themselves.”⁵⁶ To accomplish this goal, West argued that prenatal care offered the following: preservation of the mother’s health who served as the growing environment for the fetus, increasing the weight of the newborn, and educating mothers about the importance of breastfeeding. The result would be infants who were “stronger and better fitted for life.”⁵⁷ Thus, West proposed that the objective of prenatal care was not only to prevent infant mortality, but also to ensure the production of “robust babies instead of weaklings” in order to generate “a race of healthier babies.”⁵⁸

Without a doubt Adair, who was a member and a leader of AASPIM, was not only influenced by eugenics, but actively supported it. Many of his publications throughout his career

⁵⁵ Irving Fisher, “Address,” *Transaction of the American Association for Study and Prevention of Infant Mortality* 1, no. 1 (1910): 38–42.

⁵⁶ Mrs. Max West, “The Prenatal Problem and the Influence Which May Favorably Affect This Period of the Child’s Growth,” *The American Journal of Obstetrics and Diseases of Women and Children* 73, no. 3 (March 1916): 416–24.

⁵⁷ West, 221.

⁵⁸ Mrs. Max West, “The Development of Prenatal Care in the United States,” in *American Association for Study And Prevention Of Infant Mortality Transactions Of The Fifth Annual Meeting*, vol. 5 (Baltimore: The Franklin Printing Co., 1915), 69–114.

regarding maternal and prenatal care used eugenic language. For example, in “The Relation of Obstetrics to the Community,” Adair argued that prenatal care was a necessary in the battle against the “threat” of race suicide:

“The diminishing birth rate, especially among the more substantial and better classes of society, has its ultimate threat of race suicide. The maintenance of the same or of a relatively or actually increased birth rate and survival of individuals among the more undesirable and weaker members of society, leads to the ultimate survival of the unfittest. These problems are giving rise in many countries to serious discussion as to the best means of conserving mothers and offspring.”⁵⁹

The use of eugenic language to support maternal welfare and prenatal care programs was intended to offer greater legitimacy to the role of the obstetrician and the value of prenatal care.

Prenatal care developed in the context of these three movements – the obstetrics movement, the infant welfare movement, and the eugenics movement. Initially a grassroots endeavor by the infant welfare activists, prenatal care received the professional support of obstetricians eager to expand their control and influence over childbirth and was further strengthened by the eugenics movement. Adair was undeniably influenced by all three movements, which all served to shape him as a leader and prenatal care advocate. The remainder of this thesis will explore how Adair’s unique position at the intersection of these movements gave him the influence and ability to establish prenatal care as we know it today.

⁵⁹ Fred Lyman Adair, “The Relation of Obstetrics to the Community,” *Transactions of the American Association on the Study and Prevention of Infant Mortality* 12, no. 13 (1921): 53–64.

Chapter 2: Physician-centric Prenatal Care

Prenatal Care at the Intersection of Public Health and Medicine

The 1920s marked a new phase of Fred Adair's career. As he began to establish himself as a distinguished academic obstetrician-gynecologist, Adair also rose in influence in the public sector. His work at the University of Minnesota led to his promotion to full professorship of obstetrics and gynecology in 1926. Two years later, Adair moved to the University of Chicago to succeed Joseph De Lee as chairman of the Department of Obstetrics, which at that time was considered "one of the highest positions in the land" of academic obstetrics.⁶⁰ Adair's rise to success in academic medicine earned him a reputation; a colleague described him as one who "has never been content with mediocrity but has ever endeavored to reach the highest degree of perfection possible in his profession."⁶¹ Therefore, unsurprisingly, Adair turned his attention to new frontiers in his career, namely, public health and policy, dedicating much of his energy to organizing a new national organization and working closely with policymakers on prenatal care.

Adair's interest in public policy regarding prenatal care was largely shaped by his experience working with the American Red Cross during WWI. In 1918, under the auspices of the American Red Cross, Adair traveled to Paris to help the city establish a prenatal care program. Tasked with the mission to "investigate the obstetric situation in Paris, with special reference to prenatal care," Adair spent much of his time visiting mothers in their homes to evaluate their environmental and social situations. As a result, he gained an appreciation for the

⁶⁰ Richard Porter Adair, *Some Family Origins of Fred Lyman Adair, M.D., and His Wife Myrtle May Ingalls* (Maitland, Florida: Adair Charities, 1970), 52.

⁶¹ Daniel Marion Shutter, "Biography of Fred Lyman Adair, M. D.," in *History of Minneapolis, Gateway to the Northwest; Chicago-Minneapolis*, vol. 3 (The S J Clarke Publishing Co, 1923), 683.

social aspects of a woman's pregnancy and subsequent delivery, and stated in his report that "the relief of social distress and disease is not less important than the cure of physical ailments and diseases."⁶² With this newfound understanding of the socioeconomic aspects of prenatal care, Adair recognized that a successful prenatal care program required the coordination of the medical profession and public health agencies.

However, in the United States, such collaboration between public health and medicine seemed unlikely. Antagonism between the interrelated fields intensified after WWI as the conceptual line separating the two was beginning to blur. When public health had first developed in the early 1800s as a field dedicated to the prevention of diseases, much of the work of local public health agencies involved improving squalid living conditions and sanitation as a means to control outbreaks. Physicians not only supported such public health projects but were also active participants of local public health departments. However, in the early twentieth century, with the rise of modern bacteriology and a new understanding of infectious diseases grounded in germ theory, public health workers began to institute quarantines and vaccines as a means of preventing outbreaks.⁶³ As described by Hibbert Hill in 1913, "The old public health was concerned with the environment, the new is concerned with the individual."⁶⁴ This recognition of individuals as not only the victims of illness but the source as well exemplified the

⁶² Fred Lyman Adair, "The Development of Prenatal Care and Maternal Welfare Work in Paris Under the Children's Bureau of the American Red Cross," *American Journal of Obstetrics and Gynecology* 1, no. 2 (1920): 141–54.

⁶³ George Rosen, "The Bacteriological Era and its Aftermath," in *History of Public Health*, Revised Expanded Edition (Baltimore: Johns Hopkins University Press, 2015), 169–199.

⁶⁴ Quoted in Amy L. Fairchild et al., "The Exodus of Public Health: What History Can Tell Is About the Future," *American Journal of Public Health* 100, no. 1 (January 2010): 54–63.

changing focus in public health that brought about the “golden age of public health” during the first two decades of the twentieth century.⁶⁵

This shift in public health interventions was an unwelcome change for many physicians who viewed public health’s new focus on individuals as an infringement on their medical practices. This typically came in the form of mandatory reporting for infectious diseases. For instance, the New York City health department required physicians to report all patients who tested positive for tuberculosis. Many physicians argued that mandating physicians to disclose patient information violated the doctor-patient relationship.⁶⁶ Additionally, physicians viewed an expanding role of government in medical care as an economic threat to private practices. In the 1910s, the unfolding of socialized medicine in Europe placed American physicians on guard as similar movements began to take place in the United States such as the health centers movement. Many Progressives campaigned for the creation of centralized health centers to assume the previously separated services for schoolchildren and for mothers and babies. Although advocates emphasized that health centers would only provide ancillary services and would not replace private practices, many private physicians still strongly opposed the movement.⁶⁷ In response to the health centers movement, the American Medical Association passed a resolution declaring its opposition to all forms of “state medicine.”⁶⁸ Government-

⁶⁵ Kant Patel and Mark E Rushefsky, *The Politics of Public Health in the United States* (London and New York: Routledge, 2005), 86.

⁶⁶ Paul Starr, “The Boundaries of Public Health,” in *The Social Transformation of American Medicine* (New York: Basic Books, 1982), 145–79.

⁶⁷ Patel and Rushefsky, *The Politics of Public Health in the United States*, 87.

⁶⁸ “Proceedings of the St. Louis Session: House of Delegates,” *Journal of the American Medical Association* 78, no. 22 (May 27, 1922): 1641.

funded health programs were not only “a threat to their practice,” but also “gave too little power to the medical profession.”⁶⁹

This turf war between public health and private medicine was also present in prenatal care. When it first developed in the early 1900s, prenatal care was principally a public health endeavor. Early journal articles on prenatal care described the service as “preventative medicine as applied to obstetrics.”⁷⁰ At the time, preventative health measures, like prenatal care, connoted territories of public health. On the other hand, medicine’s scope of practice was thought to be limited to the post-hoc treatment of disease. Therefore, physicians viewed their role in prenatal care as minimal, and they would get involved only if anything medically abnormal arose. However, through the efforts of Adair, physician attitudes towards prenatal care would later change when it became incorporated into a federally-funded maternal and infant health program under the Sheppard-Towner Act in 1921.

Public health made an indelible mark on prenatal care when the Children’s Bureau elevated it to a national concern. Established in 1912, the US Children’s Bureau, under the leadership of its first director, Julia Lathrop, made the study of infant mortality a priority. Working closely with members of AASPIM, Lathrop quickly recognized the value of prenatal care as a way to prevent maternal and infant mortality and sought to increase access to prenatal care resources across the country. In 1913, the Bureau published a pamphlet on prenatal care, which provided women with detailed advice on diet and exercise during pregnancy and instruction for how to properly prepare for childbirth. In 1918, Lathrop proposed the Maternity

⁶⁹ Patel and Rushefsky, *The Politics of Public Health in the United States*, 87.

⁷⁰ C. A. Ritter, “Why Prenatal Care?” *The American Journal of Obstetrics and Diseases of Women and Children* 80, no. 5 (1919): 523.

and Infancy Bill, later known as the Sheppard-Towner Bill, in order to establish maternal and child health services in each state with the aid of federal funding. The bill proposed providing each state with at least \$5,000 via the Children's Bureau with a dollar-for-dollar matching system, up to a cap determined by the state's population. The design and administration of prenatal services would be dictated locally by the state but would have to be reviewed and approved by the Federal Board of Maternity and Infant Hygiene, which was composed of the head of the Children's Bureau, the Surgeon General, and the US Commissioner of Education.⁷¹

Viewed as another overt interference of the government in delivery of health care services, the Sheppard-Towner Bill created an uproar in the medical community. Physicians, especially obstetricians, strongly opposed the involvement of the federal government in prenatal care. The leaders of the American Gynecological Society including Adair released a statement in opposition to the bill saying that though they endorsed the goal of the bill, they "oppose in principle the control of health measures by nonmedical individuals or boards."⁷² Adair and his colleagues opposed the bill primarily because Lathrop and other leaders of the Children's Bureau did not have a medical background, and physicians therefore, accused the bill for being a slippery slope towards "state medicine." Multiple state medical societies in Illinois, Massachusetts, New York, Ohio and Indiana followed suit.⁷³ The Illinois Medical Society called Washington D. C. "a hotbed of Bolshevism."⁷⁴

⁷¹ Kriste Lindenmeyer, *A Right to Childhood: The U.S. Children's Bureau and Child Welfare, 1912-46* (Urbana and Chicago: University of Illinois Press, 1997), 79-89.

⁷² Fred Lyman Adair, "Sheppard Towner Bill," *American Journal of Obstetrics and Gynecology* 2, no. 1 (1921): 117.

⁷³ Carolyn M. Moehling and Melissa A. Thomasson, "The Political Economy of Saving Mothers and Babies: The Politics of State Participation in the Sheppard-Towner Program," *The Journal of Economic History* 72, no. 1 (March 2012): 75-103.

⁷⁴ Quoted in J. Stanley Lemons, "The Sheppard-Towner Act: Progressivism in the 1920s," *The Journal of American History* 55, no. 4 (March 1969): 776-86.

Moreover, many physicians were skeptical of the very existence of the Children's Bureau as it had been conceived not by the medical community but by the National Child Labor Committee. Consequently, although the Children's Bureau was created to "investigate the questions of infant mortality, birth rate, accidents and diseases of children" among other things, it was established within the Department of Labor and Commerce.⁷⁵ Dr. Thomas Rotch, a pediatrician, warned the American Academy of Medicine that the Children's Bureau "will be the center from which all work connected with children will emanate," and "the danger is in allowing it to be too closely held by [Child Labor people]."⁷⁶ Rotch, along with other physicians, believed that, ultimately, child welfare was a matter of health and therefore required medical oversight and expertise and should not be left to non-medical bureaucrats.

Despite opposition from organized medicine, the bill passed in 1921 and became the first peacetime federal aid bill, owing its victory to the women's suffrage movement, which achieved voting rights for women just the year prior.⁷⁷ However, Lathrop took heed of the criticisms from the professional medical societies and instituted an obstetric advisory committee to aid in the administration of the act. Furthermore, to protect physician interests, the following section was redacted from the bill before it was passed: "Provision of instruction in the hygiene of maternity and infancy through public health nursing, consultation centers, and other suitable methods; and the provision of medical and nursing care for mothers and infants at home or at a hospital when necessary."⁷⁸ By ensuring that federal funds would not go directly to the provision of medical

⁷⁵ Julia C. Lathrop, "The Children's Bureau," *The American Journal of Sociology* 18, no. 3 (November 1912): 318–30.

⁷⁶ Thomas Morgan Rotch, "Discussion," *Bulletin of the American Academy of Medicine* 11, no. 6 (December 1910): 653–54.

⁷⁷ Lemons, "The Sheppard-Towner Act: Progressivism in the 1920s," 779.

⁷⁸ Grace Abbott, "Federal Aid for the Protection of Maternity and Infancy," *American Journal of Public Health* 12, no. 9 (September 1922): 737–42.

advice and treatment, physicians were able to at least protect their economic interests and place limits on government involvement in maternal and infant health care.

The AMA continued to voice its opposition against the Sheppard-Towner Act through its expiration in 1929, but for Adair, the passage of the Act was an opportunity. Pushing forward his belief that “no plan of prenatal care can be successful in any State where the participation and cooperation of the medical profession has not been obtained,” Adair viewed passage of the Act as a catalyst for establishing his vision for prenatal care within a larger maternal welfare program – one that placed the physician in charge.⁷⁹ Despite physicians’ opposition to the Sheppard-Towner Act, it ultimately served to help obstetricians gain control of prenatal care through the efforts spearheaded by Adair. Adair occupied a distinctive space within the tension between public health and private physicians. He believed that “frankness and harmony between those who are officially responsible for carrying on the work and those who are actually in the field” were essential to a successful national maternal welfare program.⁸⁰ However, Adair’s vision for the partnership did not put public health officials and physicians on equal standing, but rather placed the physician, in particular the obstetrician, in charge.

Towards a Physician-centric Prenatal Care

While the Sheppard-Towner Bill was being debated by Congress, Adair formed a coalition of physicians to lead in the national maternal welfare movement. Soon after his return from Paris in 1919, Adair attended the tenth annual conference of what became the American

⁷⁹ Fred Lyman Adair, *The Physician’s Part in a Practical State Program of Prenatal Care* (Washington: Government Printing Office, 1926), 7-8.

⁸⁰ Adair, 7.

Child Hygiene Association, then known as AASPIM. Disappointed by the lack of discussion on “the problems of mothers, the unborn and the newly born” and apprehensive about the pending vote on the Sheppard-Towner Bill, Adair proposed a resolution to create “one organization, one national organization, which would father or mother maternal welfare... and secure the active cooperation of obstetricians in developing the maternal welfare program in conjunction with the infant welfare program.”⁸¹ The resolution passed and the Joint Committee on Maternal Welfare was established. By 1921, the committee included representatives from American Child Hygiene Association, the American Gynecological Society, the American Association of Obstetricians, Gynecologists, and Abdominal Surgeons, and the American Pediatric Society.⁸² Adair’s creation of a centralized, physician-led organization on maternal welfare was a deliberate response to the Sheppard-Towner Bill, and his attempt to ensure that prenatal care would be under the control of physicians and not political bureaucrats.

One of the primary purposes of the Joint Committee was to stimulate physician interest and leadership in maternal welfare and prenatal care. Throughout the duration of the Sheppard-Towner Act, the Joint Committee worked in an advisory capacity with the Children’s Bureau and helped to set up physician leadership in each state. The committee circulated a letter to medical societies around the country calling for increased engagement and commitment to improving “the conditions surrounding maternity and early infancy” and encouraged state medical societies to appoint a maternity and infancy committee within the state department of health to direct prenatal care services under the Sheppard-Towner Act.⁸³ By 1928, every state had physicians

⁸¹ Fred Lyman Adair, “The Joint Committee on Maternal Welfare, Its Organization and Purposes,” *American Journal of Obstetrics and Gynecology* 9, no. 4 (1925): 571–74.

⁸² Adair, 571.

⁸³ Adair, 244.

who were “in immediate charge of the work – usually as directors of the maternity and infancy or child-health divisions of the state department of health.”⁸⁴

The physician-led maternity and infancy health divisions within the state departments of health determined how federal funding provided by the Children’s Bureau would be spent. In many cases, these decisions reflected the interests of physicians. For example, several states, particularly southern states, used federal funding to regulate midwives, particularly among “foreign-born and racial groups” by requiring them to attend midwifery courses that were often expensive in order to get licensed. Although, the regulations were presented as a way to educate “ignorant midwives” and improve the quality of care, the result was that most midwives could not afford to get licensed, and therefore, were not legally allowed to practice, which helped address what many obstetricians called “the midwife problem.”⁸⁵

During the 1920s, the Joint Committee also established new recommendations of prenatal care that gave physicians a more direct and active role. The Joint Committee’s 1926 *Standards of Prenatal Care* recommended that the patient “be examined by a physician at least once a month during the first six months, then every 2 weeks or oftener as indicated, preferably every week in the last four weeks.”⁸⁶ Compared to the pamphlet on prenatal care published by the Children’s Bureau in 1913 in which women were encouraged to visit a physician at least once during pregnancy, the physician was now the direct primary prenatal care provider as opposed to the nurse.⁸⁷ This shift from occasional visits to the doctor as requested by the patient or

⁸⁴ Children’s Bureau, *The Promotion of the Welfare and Hygiene of Maternity and Infancy* (Washington: Government Printing Office, 1929), 6.

⁸⁵ Kelena Reid Maxwell, *Birth Behind the Veil: African American Midwives and Mothers in the Rural South* (New Brunswick: Rutgers University, 2010).

⁸⁶ Fred Lyman Adair, “Standards of Prenatal Care,” *American Journal of Obstetrics and Gynecology* 12, no. 3 (1926): 415–19.

⁸⁷ Mrs. Max West, *Prenatal Care* (U.S. Government Printing Office, 1913).

recommended by a nurse to a strict physician-centric prenatal care schedule positioned the doctor to have greater control of pregnancy.

When Congress voted to defund the Sheppard-Towner Act in 1927 due to persistent pressure from the AMA and other conservative organizations, Adair was among the few physicians who supported its extension. He submitted a letter in support of the bill to Congress stating that “excellent work has been done by the Children’s Bureau in educating the laity to the importance of proper maternal care.” Adair was, however, careful to ensure that his support was contingent on “the Federal board continuing its past policy of noninterference in ways and means, and limits its action to an educational program and stimulation of local activities by financial and other methods of support.”⁸⁸ Given his position as an obstetrical consultant for the Children’s Bureau and his role in the Joint Committee on Maternal Welfare, Adair likely thought that he could ensure that these conditions were met.

Adair recognized that, under the Sheppard-Towner Act, the Children’s Bureau had helped to increase public awareness about prenatal care and to create an infrastructure for maternal care delivery. During the time that the Sheppard-Towner Act was in effect, nearly 3,000 prenatal clinics were established in 48 states and public health nurses conducted millions of prenatal visits and distributed countless of educational materials to pregnant women.⁸⁹ Adair later credited the Sheppard-Towner Act for being “the most comprehensive national program” that helped prenatal care initiatives and organizations assume “national significance.”⁹⁰ Echoing

⁸⁸ Parker, ed., *Child Welfare Extension Service: Hearing Before the Committee on Interstate and Foreign Commerce House of Representatives* (Washington: United States Government Printing Office, 1929), 226.

⁸⁹ Kriste Lindenmeyer, “Saving Mothers and Babies: Designing and Implementing a National Maternity and Infancy Act, 1918-30,” in *A Right to Childhood: The U.S. Children’s Bureau and Child Welfare, 1912-46* (Urbana and Chicago: University of Illinois Press, 1997), 76–107.

⁹⁰ Fred Lyman Adair, “The Development of Maternal Welfare Activities,” *American Journal of Obstetrics and Gynecology* 40, no. 4 (1940).

these sentiments, another leading obstetrician, Dr. George Kosmak, who despite opposing the extension of the Sheppard-Towner Act, nevertheless stated in a 1931 editorial that “the propaganda associated with [the Sheppard-Towner Act] did arouse the national conscience” with regards to prenatal care.⁹¹

By the 1930s, pregnancy and birth had largely become a medical enterprise. Prenatal care was beginning to become established as part of routine obstetrical care while physician-attended and hospital births began to increase in number.⁹² Although many factors contributed to the medicalization of pregnancy and birth, the Sheppard-Towner Act played a significant role in expediting the process by creating a sense of urgency in the medical community. In an effort to ensure that all phases of a woman’s pregnancy remain under the control of physicians, Adair dedicated much of his time during the 1920s to the public sector by serving as an advisor to the U.S. Children’s Bureau and working to secure physician leaders in every state to help administer prenatal care programs. As a result, prenatal care, initially a preventative service administered by public health nurses, was now medicalized service requiring direct physician supervision.

Increasing the Supply and the Demand for Obstetricians

The Sheppard-Towner Act, which generated awareness about prenatal care, did not increase the number of physicians who Adair felt were qualified to give prenatal care. At the White House Conference on Child Health and Protection of 1930, Adair stated that in order to fully address the problem of maternal and infant mortality, “it is necessary to have the laity

⁹¹ George W. Kosmak, “Intensive Prenatal Care,” *American Journal of Obstetrics and Gynecology* 21, no. 1 (1931): 149–50.

⁹² Dorothy C. Wertz, “What Birth Has Done for Doctors: A Historical View,” *Women & Health* 8, no. 1 (April 1983): 7–24.

educated to seek and demand adequate attention.” However, Adair cautioned his audience against his own statement by saying that “it is useless to create the desire unless there is adequate and efficient personnel to supply the demand.”⁹³ In other words, while it was necessary to educate women on the importance of receiving prenatal care from a qualified physician, there must be enough properly trained physicians to supply the demand. Therefore, with the foundation laid by the Sheppard-Towner Act, Adair dedicated the remainder of his career to improving obstetrical training by establishing the American Board of Obstetrics and Gynecology (ABOG) and educating the public about the need for obstetricians through the work of the American Committee on Maternal Welfare (ACMW).

Perhaps the most pivotal event that made obstetrical training a fixture of all medical schools was the formation of the American Board of Obstetrics and Gynecology (ABOG) in 1930, founded by Adair and eight other prominent obstetrician-gynecologists. Following the increasingly popular trend among specialty societies, ABOG became the third specialty examining board to be established following ophthalmology in 1917 and otolaryngology in 1924.⁹⁴ However, during the early years of ABOG’s existence, the Board experienced difficulties in getting its certification accepted by medical schools and hospitals. At the time, many medical institutions lacked obstetrics and gynecology departments as well as the facilities for training, and as a result, medical school faculty and hospital administrators could not agree on whether or not to recognize obstetrics and gynecology as a specialty. In an effort to address these obstacles, the board provided guidelines for creating of obstetrics and gynecology departments in all

⁹³ Fred Lyman Adair, “The White House Conference,” *American Journal of Obstetrics and Gynecology* 21, no. 3 (1931): 442–44.

⁹⁴ Rosemary Stevens, *American Medicine and the Public Interest*, Updated (Berkeley: University of California Press, 1998), 199–203.

hospitals and schools, advocated for the provision of adequate facilities for training, and established standardized qualifications for trainees seeking to specialize. Within two years of the board's establishment, Adair noted that "the initially adverse and pessimistic attitude of some colleagues had been largely overcome. Already the prestige of the Board was becoming established."⁹⁵ The creation of ABOG established and standardized the training in obstetrics and gynecology across the country, which not only elevated the legitimacy of the specialty, but improved training for those interested in specializing.

In addition to improving obstetrical training, ABOG also served to improve the public's ability to select a provider. ABOG marketed itself as a tool for patients to determine the qualifications of the physician. One of the founders of ABOG, Dr. Walter Dannreuther, asserted in 1932 that the profession had an obligation to protect patients from "the malpractices of mushroom specialists,"⁹⁶ by giving the public a way to identify qualified, board-certified specialists. Magazines and newspapers publicized the function of ABOG and empowered women to utilize ABOG's certification as a way to seek out the safe and scientific childbirth they deserve. In a 1936 issue of the *Ladies' Home Journal*, mothers were encouraged to inquire "the head of every hospital and ask whether the chief staff obstetricians hold such certificates of scientific training and ability."⁹⁷ Accordingly, ABOG provided a way for patients to not only make an educated decision about their choice of doctor but also empowered them to demand the services of a board-certified obstetrician during pregnancy and childbirth.

⁹⁵ Adair, *The Country Doctor and the Specialist*, 153.

⁹⁶ Quoted in Stevens, *American Medicine and the Public Interest*, 204.

⁹⁷ Paul De Kruif, "Forgotten Mothers," *Ladies' Home Journal* 53, no. 12 (December 1936): 64.

However, Adair recognized that while ABOG provided a tool for patients to receive high quality care, women first must realize that they need such care. In the absence of a federally funded program, Adair knew that it would not be enough to just influence public officials, but that he needed to educate the public directly. In 1934, the Joint Committee incorporated and was renamed the American Committee on Maternal Welfare (ACMW). Initially a committee of only physicians from three medical societies, the ACMW now had members from over 20 different organizations including the Children's Bureau and the American Public Health Association. The purpose of the committee remained largely unchanged, although the work of ACMW placed greater emphasis on educating the public on matters of maternal welfare. It published a number of pamphlets on prenatal and maternal care and distributed them to the public for free.⁹⁸

The ACMW's claim to fame was its production of the film, *The Birth of a Baby*, an educational feature-length released in theaters in 1937. The purpose of the film was to address the issue of maternal and infant mortality by educating the public about safe, medically supervised pregnancy and childbirth. The film followed the story of a young woman named Mary who upon finding out she is pregnant immediately visits Dr. Wilson for a prenatal exam. Throughout the film, Mary regularly visits Wilson who examines her, performs tests to evaluate her for infections, and answers all her questions. The film then concludes with a live birth highlighting the aseptic techniques of the doctor. Despite widespread endorsement and approval from the medical community, the film proved to be very controversial soon after its release resulting in its ban in several major cities including New York and Chicago. Critics considered

⁹⁸ Fred Lyman Adair, "The American Committee on Maternal Welfare: Chairman's Address," *American Journal of Obstetrics and Gynecology* 35, no. 3 (1938): 533–35.

the film “obscene” and violated “the sacredness of motherhood.” However, according to one reviewer, the controversy was sparked by a small minority of dissenters whose opposition and censorship ultimately helped to publicize the film. As a result, “almost overnight, *The Birth of a Baby* became the most discussed picture since *The Birth of a Nation*.”⁹⁹

The Birth of a Baby was widely successful and played in American theaters for two years. In addition to being shown in theaters in over 1,500 towns and cities across the country, the film was featured in a photo essay published in LIFE Magazine, which had a circulation of over two million.¹⁰⁰ With such a far-reaching audience, the film likely contributed to changing public perception of pregnancy and birth. Film historian, Eric Schaefer, argued that the film portrayed pregnancy as “abnormal” and thus required the interventions of Dr. Wilson. Moreover, the film “presents medicalized birth as overwhelmingly positive” and “suggests that Mary gradually loses control over the process as her doctor becomes increasingly central.”¹⁰¹ Although the full extent of the film’s cultural impact is difficult to assess, it is notable that during the decade following the film’s release, hospital deliveries increased from 55% to 90%.¹⁰² Through film, Adair normalized the medicalization of pregnancy and childbirth and showed viewers what maternity care should look like – regular visits to a doctor (preferably an obstetrician), blood work, physical exams, proper aseptic technique, etc. – and pregnant women could, therefore, demand to receive such care.

⁹⁹Geraldine Sartain, “The Cinema Explodes the Stork Myth,” *The Journal of Educational Sociology* 12, no. 3 (November 1938): 142–46.

¹⁰⁰ “‘The Birth of a Baby’ Aims to Reduce Maternal and Infant Mortality Rates,” *LIFE Magazine*, April 11, 1938.

¹⁰¹ Eric Schaefer, “*Bold! Daring! Shocking! True!*”: *A History of Exploitation Films, 1919-1959* (Durham and London: Duke University Press, 1999), 187-189.

¹⁰² Center for Disease Control and Prevention (CDC), “Healthier Mothers and Babies - 1900-1999,” *MMWR Morbidity and Mortality Weekly Report* 48, no. 38 (1999): 849–58.

The impact that Adair had on prenatal care and the field of obstetrics and gynecology was unquestionable. Under the Sheppard-Towner Act, Adair brought the care of pregnancy and birth squarely under the authority of physicians through his leadership in the Joint Committee on Maternal Welfare. Following the Act's expiration, Adair established his lasting legacy in the field of obstetrics and gynecology by founding the American Board of Obstetrics and Gynecology, and in the popular culture by producing the film, *The Birth of a Baby*. All of Adair's work in influencing public policy on prenatal care, improving obstetrical education and increasing the field's prestige, and changing cultural perceptions on pregnancy and birth have all contributed to our modern day understanding of prenatal care – what it is for, how it is done, and who should provide it.

Chapter 3: Prenatal Care as a Eugenic Tool

In the 1910s, prenatal care was just starting to be incorporated into the medical lexicon. By the end of the 1930s, it became an institutionalized practice of medical professionals and a matter of national concern, with multiple committees and boards created to discuss its proper administration throughout the United States. Part of the rapid rise of prenatal care was certainly due to the work of obstetricians like Adair who actively promoted it. The previous chapter detailed how the need for prenatal care (manufactured in part by those who wanted to administer it) became an occasion for the solidification of obstetrics as a recognized specialty. However, a full assessment of the history of prenatal care would not be complete without mentioning the dark undercurrent that motivated Adair's vision of prenatal care: eugenics.

Rooted in Darwin's theory of natural selection and Mendelian genetics, the American eugenics movement began in the early 1900s as the scientific venture of two scientists, Charles Davenport, a zoologist, and Harry Laughlin, an agricultural scientist. Davenport and Laughlin's interest in the study of heredity stemmed from their work breeding plants and animals. In 1910, the two joined forces and founded the Eugenics Records Office at Cold Spring Harbor where they directed their study of heredity towards another species: humans. By collecting and analyzing "normal" and "sub-normal" family lineages, Davenport and Laughlin provided the scientific basis for a number of eugenic policies during the 1920s such as forced sterilization and anti-immigration laws.¹⁰³ Eugenists like Laughlin and Davenport helped to establish eugenics as a science, which gave it academic legitimacy. As a result, eugenics quickly gained the support of social scientists, philosophers, and even theologians, and by the 1920s, hundreds of universities across the country began offering courses on eugenics.¹⁰⁴

Eugenic ideology quickly became a driving force that dominated American cultural thought during the first few decades of the twentieth century. Interest in eugenics spread well beyond academia and into the political sphere. At the turn of the century, Progressive-era reformers looked to eugenics to help address new social and economic problems brought about by rapid urbanization and industrial capitalism. One such problem was the rise of what some called the "new morality." As middle-class white women began to embrace social and sexual independence, the "new morality" characterized by greater sexual freedom for women replaced

¹⁰³ Philip K. Wilson, "Harry Laughlin's Eugenic Crusade to Control the 'Socially Inadequate' in Progressive Era America," *Patterns of Prejudice* 36, no. 1 (2002): 49–67.

¹⁰⁴ Michael A. Rembis, "Explaining Sexual Life to Your Daughter: Gender and Eugenic Education in the United States during the 1930s," in *Popular Eugenics: National Efficiency and American Mass Culture in the 1930s*, ed. Susan Currell and Christina Cogdell (Athens: Ohio University Press, 2006), 91–119.

what Sigmund Freud had called “civilized morality,” which was based on the traditional gender roles that defined Victorian femininity. However, according to historian Wendy Kline, Progressive reformers and politicians feared that the “new morality” would lead to moral and racial decay. Eugenics, therefore, offered an efficient and scientific moral system that combined the control of fertility and racial progress to replace nineteenth-century “civilized morality.”¹⁰⁵

Both conservative and liberal reformers used eugenic ideology to justify their respective political positions, but what united all eugenicists was the goal of “race betterment” for native white Americans. For eugenicists, women were the gatekeepers of racial progress, but they also carried the threat of racial destruction. Therefore, central to the American eugenic ideology was the control and regulation of female fertility. This was largely done through negative eugenic policies including segregation of the “feble-minded” and forced sterilization of women who were deemed “unfit” to become mothers. In 1927, the Supreme Court decision in the *Buck v. Bell* case, which upheld Virginia’s compulsory sterilization law and legalized the forced sterilization of mentally disabled women “for the health of the individual patient and the welfare of society.” Under such policies, eugenicists disproportionately targeted the poor, often African American women confined to mental institutions.¹⁰⁶ By 1937, thirty states had sterilization laws and over 60,000 sterilization procedures had been performed.¹⁰⁷

Most historical accounts of the American eugenics movement focus on negative eugenic policies. However, Kline has argued that positive eugenic strategies had a less visible but longer

¹⁰⁵ Wendy Kline, *Building a Better Race: Gender Sexuality, and Eugenics from the Turn of the Century to the Baby Boom* (Berkeley: University of California Press, 2001), 1-3.

¹⁰⁶ Andre N. Sofair, “Eugenic Sterilization and a Qualified Nazi Analogy: The United States and Germany, 1930-1945,” *Annals of Internal Medicine* 132, no. 4 (February 15, 2000): 312-19.

¹⁰⁷ Paul A. Lombardo, *Three Generations, No Imbeciles: Eugenics, the Supreme Court, and Buck v. Bell* (Baltimore: Johns Hopkins University Press, 2008), 288-294.

lasting impact compared to negative eugenics. Relying primarily on educational and propaganda materials, positive eugenic measures mainly targeted white middle-class women and encouraged them to fulfill their procreative duty. From articles in popular magazines such as *Cosmopolitan* to biology and health textbooks, the positive eugenic message proliferated throughout the country during the 1920s.¹⁰⁸ With such insidious measures, eugenicists were able to continue to impose their agenda long after the field of eugenics lost scientific and academic credibility after WWII.¹⁰⁹

Both negative and positive eugenic ideologies formed the basis of Adair's vision of prenatal care. As a eugenicist, Adair regarded prenatal care as a tool to be used for the purpose of improving the white race. During the 1920s, he advocated for the use of prenatal care to make child bearing safer in order to combat the declining birth rate among high and middle-class white women. In the 1930s, Adair proposed a new expanded definition of prenatal care that included preconceptional care, which suggested the use of physicians to determine a woman's hereditary fitness prior to reproduction. Evidently, for Adair, the purpose of prenatal care was fundamentally eugenic. This section will focus on Adair as a eugenicist and how he shaped prenatal care into a eugenic tool.

Race Betterment through Prenatal Care

Adair's motivation behind his vision for prenatal care was rooted in the eugenic view of white women as "mothers of the race." In an article describing the importance of obstetrics and prenatal care in society, Adair advocated for the inherent value of obstetrics because it was

¹⁰⁸ Laura Doyle, "Of Race and Woman: Eugenics, Motherhood, and Racial Patriarchy," in *Bordering on the Body: The Racial Matrix of Modern Fiction and Culture* (New York: Oxford University Press, 1994), 10–34.

¹⁰⁹ Kline, *Building a Better Race: Gender Sexuality, and Eugenics from the Turn of the Century to the Baby Boom*, 155.

fundamentally about caring for the mother who was “the most important individual member of society... and is the most important factor in perpetuating the human race.” This elevation of motherhood also served to emphasize the urgency of preventing maternal mortality by provision of prenatal care and good obstetrical technique. Adair petitioned for improved efforts to prevent maternal mortality “not only from the standpoint of humanitarianism, but also from that of necessity.” According to Adair, this necessity was due to the declining birth rate, resulting in a “diminishing supply” of mothers “among the more substantial and better classes of society,” which “has its ultimate threat of race suicide.”¹¹⁰ In other words, Adair suggested that mothers, specifically upper and middle-class white mothers, were worth saving for their procreative powers. By grounding his plea for improving maternal welfare and prenatal care services in eugenic ideology, Adair demonstrated that his vision for prenatal care was not meant to apply to all women, but rather was limited to upper and middle-class white women.

While the white mother’s well-being was certainly an important aspect of prenatal care, the ultimate goal of prenatal care was “the beneficial influencing of the health of the offspring.” Through prenatal care, women could prevent the congenital transmission of infectious diseases like syphilis as well as reduce the risk of birth injuries by allowing time for the physician to plan the delivery. However, Adair had a far larger purpose for prenatal care. In his first study on prenatal care in Paris during WWI, Adair identified that one of the fundamental objectives of a prenatal care and maternal welfare program was “to maintain the integrity of the human race” and “constantly improve its character.” In other words, foundational to Adair’s interest in prenatal care was the larger impact it would have on the future of the white race, which

¹¹⁰ Adair, “The Relation of Obstetrics to the Community,” 53.

necessarily involved the study of heredity. Prenatal care, according to Adair, allowed for the investigation of “the development and transmission of degeneracy, insanity and physical defects,” which “would be of great benefit to the human race.” Evidently, for Adair, prenatal care was not only a way to apply eugenics, but also created the opportunity to advance the field of eugenics.¹¹¹

When prenatal care came to the attention of Julia Lathrop, the first director of the Children’s Bureau, she made it the centerpiece of the Sheppard-Towner Act. Although the prenatal materials and services funded by the Sheppard-Towner Act were intended to aid all mothers and infant, in reality, the expansion of prenatal services under the act magnified the eugenic and racist views of its primary advocate, Adair. According to historian Katherine Bullard, under the Sheppard-Towner Act, the Children’s Bureau disseminated teaching materials and held educational conferences on prenatal and child hygiene, that reflected a “focus on white children’s social citizenship.” For instance, there was a clear differential in the distribution of funds as evidenced by photos showing poorly resourced “Negro conferences” compared to the more professional “white conferences.”¹¹² Furthermore, in Indiana, the state’s Division of Infant and Child Hygiene, which was established under the Sheppard-Towner Act, hosted a number of “Better Baby Contests” with the help of federal funding. Similar to livestock breeding competitions commonly seen at state fairs, judges ranked and scored infants based on eugenic standards for physical and mental traits. Notably, the contests excluded entries from African

¹¹¹ Adair, “The Development of Prenatal Care and Maternal Welfare Work in Paris Under the Children’s Bureau of the American Red Cross.”

¹¹² Katherine Bullard, “Children’s Future, Nation’s Future: Race, Citizenship, and the United States Children’s Bureau,” in *Raising Citizens in the “Century of the Child”*: (New York: Berghahn, 2014), 53–68.

American children.¹¹³ Thus, while the Sheppard-Towner Act increased national awareness about prenatal care, it also promoted the eugenic ideal of the white American baby.

Adair's vision for prenatal care was deeply rooted in eugenic ideology and driven by the hope for race betterment. Consistent with positive eugenics, the purpose of prenatal care was "to safeguard the life and health of the mother... and leave her with a desire and willingness to bear children in sufficient numbers to perpetuate the human race."¹¹⁴ In addition to quantity, prenatal care, for Adair, was also about the quality of future generations. Adair believed that while prenatal care "has definite and concrete results in the existing generation, [it] has a more permanent effect on future generations and is therefore intimately associated with problems of heredity."¹¹⁵ This fixation on heredity served to foreshadow his vision of preconceptional care.

Preconceptional Care as a Negative Eugenic Tool

Although the Sheppard-Towner Act ended in 1929, the relationship between prenatal care and eugenics continued to deepen. In 1930, Adair was appointed as chairman of the Committee on Prenatal and Maternal Care for the White House Conference on Child Health and Protection organized by President Herbert Hoover and Secretary of Interior, Ray Lyman Wilbur. The conference was undoubtedly influenced by eugenic ideology. In his opening address, President Hoover remarked that "if we could have but one generation of properly born, trained,

¹¹³ Alexandra Minna Stern, "Making Better Babies: Public Health and Race Betterment in Indiana, 1920-1935," *American Journal of Public Health* 92, no. 5 (May 1, 2002): 742-52.

¹¹⁴ Fred Lyman Adair, "Prenatal Supervision," *Nebraska State Medical Journal* 16, no. 7 (July 1931): 253-58.

¹¹⁵ Adair, "The Development of Prenatal Care and Maternal Welfare Work in Paris Under the Children's Bureau of the American Red Cross," 141-55.

educated and healthy children, a thousand other problems of government would vanish.”¹¹⁶

Echoing the President’s remarks, Wilbur stated, “The intelligent control of our human stock offers a fundamental solution of some of our present difficulties and gives promise of a greater future for us as a people.”¹¹⁷ Evidently, according to Hoover and Wilbur, the ultimate goal of eugenics was not only to improve the health of children but to create a hereditarily stronger generation of people who could withstand the “present difficulties” such as the Great Depression.

In line with the eugenic theme set forth by Hoover and Wilbur, Adair introduced a new medical eugenic tool, “preconceptional care,” in his chairman’s address. He described preconceptional care as an extension of prenatal care that dealt with the period prior to pregnancy, which allowed the physician to address congenital, infectious, or environmental problems that could have a detrimental effect on the potential pregnancy. The purpose of preconceptional care was “to insure the proper growth and development of normal parents... free from conditions which may make childbearing dangerous to them or the fetus a hazard to society.” In other words, preconceptional care focused on treating any underlying diseases such as syphilis and determining the hereditary “fitness” of the potential parents in order to make childbearing safer and avoid the birth of “unfit” babies who, as described by Adair, “are defective and constitute a burden or menace to society.”¹¹⁸

Adair’s vision for preconceptional care gave physicians even greater control over reproduction by allowing them to directly apply eugenics to their medical practice. No longer

¹¹⁶ Quoted in Wendy Kline, “A New Deal for the Child: Ann Cooper Hewitt and Sterilization in the 1930s,” in *Popular Eugenics: National Efficiency and American Mass Culture in the 1930s*, ed. Susan Currell and Christina Cogdell (Athens: Ohio University Press, 2006), 17–43.

¹¹⁷ Ray Lyman Wilbur, “A Survey and a Challenge,” in *White House Conference, 1930: Addresses and Abstracts of Committee Reports* (New York: The Century Co., 1931), 365.

¹¹⁸ Fred Lyman Adair, “The Address of the Chairman of the Committee on Prenatal and Maternal Care,” *American Journal of Obstetrics and Gynecology* 21, no. 6 (1931): 767–83.

was the obstetrician tasked only with ensuring a safe delivery and the birth of a healthy baby, but he must also aim for hereditarily “*normal* reproduction” by determining who was hereditarily fit or unfit to reproduce with the ultimate goal of “insuring the reproduction of normal offspring in sufficient numbers to preserve the human race and promote its advancement.”¹¹⁹ According to Adair, “normal reproduction” could only be achieved by obtaining a comprehensive family, social, and medical history, physical exam, and laboratory tests prior to conception. In the same way that Adair saw physicians as the best equipped at providing prenatal care, Adair believed that physicians should be the ones making the decision on the “fitness” of a couple based on medical and scientific knowledge.

Adair’s concept of preconceptional care offered an alternative negative eugenic tool that allowed physicians to discourage “unfit” parents from procreating. However, Adair’s proposed model relied on education as a means of preventing reproduction, which he acknowledged as a notable weakness: “Many of the individuals who need such education are more or less irresponsible and will not react favorably to such a plan except under compulsion.”¹²⁰ Yet, compulsory methods such as forced sterilization laws came under scrutiny in the medical community in the mid-1930s. Major medical journals including *JAMA* and the *New England Journal of Medicine*, began to doubt the inheritance of “feeble-mindedness” and question whether or not forced sterilization was scientifically valid.¹²¹ Furthermore, because Adair, like the majority of his colleagues, did not support the use of abortion or birth control to terminate and prevent pregnancy, preconceptional care offered a less controversial alternative.

¹¹⁹ Fred Lyman Adair, “Preconceptional Care,” *American Journal of Surgery* 48, no. 1 (April 1940): 7–13.

¹²⁰ Adair, “Prenatal Supervision,” 253–58.

¹²¹ Sofair, “Eugenic Sterilization and a Qualified Nazi Analogy: The United States and Germany, 1930–1945.”

While preconceptional care did not receive the legislative support as prenatal care had under the Sheppard-Towner Act, Adair praised the passage of premarital laws that required physical examinations by doctors before the legal distribution of a marriage license, which he saw as a step towards wide-spread adoption of preconceptional care. By the end of the 1940s, 38 states had implemented premarital laws that were primarily meant for the detection and prevention of syphilis.¹²² Adair viewed premarital laws as “an admirable beginning,” and remarked that “premarital examinations are part of preconceptional care.” However, he argued that the requirements under current premarital laws “fall far short of what should be considered essential for preconceptional and premarital examinations.”¹²³ Adair believed that an adequate premarital examination would require an investigation of hereditary diseases of both partners, comprehensive medical history, physical examinations, and laboratory tests, and encouraged physicians to offer these services even if not required by state law.¹²⁴

Despite Adair’s focus on individual heredity through preconceptional care, he never lost sight of the larger, national goal of eugenics. The onset of World War II reinvigorated conversations on eugenics because many believed that unlike natural disasters like famine and pestilence which mostly affect the weakest of society, war resulted in the loss of the nation’s strongest and healthiest men. Therefore, eugenic propaganda during the war urged middle to upper class women to take on their duty as procreators.¹²⁵ At the 1939 American Congress of Obstetrics and Gynecology, Adair, who organized and chaired the congress, remarked during his

¹²² N. J. Fiumara et al., “A Plan to Simplify Premarital Laws,” *American Journal of Public Health* 40, no. 10 (1950): 1238–40.

¹²³ Adair, “Preconceptional Care,” 9.

¹²⁴ Adair, 11.

¹²⁵ Kline, *Building a Better Race: Gender Sexuality, and Eugenics from the Turn of the Century to the Baby Boom*, 149.

opening address, “Democracy and civilization have no need for abnormally developed persons with perverted ideas and behavior. Democracy needs an abundance of normally, of socially and of humanistically minded individuals among its citizens.” Adair used eugenic language to once again demonstrate the foundational importance of maternal welfare to preserving the very fabric and well-being of the nation. He then closed his address by stating, “It is important for those of us who believe in our nation and in its institutions to recognize that the mothers and their babies are the first and last line of defense.”¹²⁶ Prenatal care and maternal welfare, according to Adair, were part of the frontlines of war.

The Fall of Eugenics and the Rise of Neo-Eugenics

After WWII, eugenics fell out of favor among the American public due to its connection with the atrocities committed by the Nazis. References to eugenics were removed from textbooks and erased from many academic journals.¹²⁷ However, the decline of the eugenics movement was almost immediately followed by the rise of neo-eugenics in the 1950s and 60s. With advancements in the field of genetics like the discovery of the structure of DNA in 1953 by neo-eugenics supporters, Francis Crick and James Watson, proponents of neo-eugenics replaced the old eugenicist’s method of determining “fitness” of observing physical and mental characteristics with the use of genes as the units of selection. By emphasizing scientific rigor and individual choice, supporters of neo-eugenics attempted to dissociate themselves from its ugly predecessor.

¹²⁶ Fred Lyman Adair, “American Congress on Obstetrics and Gynecology: General Summary and Comments,” *American Journal of Obstetrics and Gynecology* 38, no. 4 (1939): 729–35.

¹²⁷ Marilyn M. Singleton, “The ‘Science’ of Eugenics: America’s Moral Detour,” *Journal of American Physicians and Surgeons* 19, no. 4 (2014): 122.

However, the goal of neo-eugenics remained largely unchanged, which was to improve humanity by objectively selecting against genetic defects and selecting for favorable genetic attributes.¹²⁸

Like his neo-eugenic colleagues, Adair never lost interest in eugenics and continued his pursuits by turning his attention to the rising field of genetics. Upon his retirement, Adair created the Adair Award which was given every two years to “a distinguished contributor to knowledge of human reproduction, with a special emphasis on genetics.”¹²⁹ Furthermore, in 1963, he founded the Myrtle Adair Genetics Clinic in Evanston, Illinois in memory of his late wife, for the “study, diagnosis, and treatment of hereditary illness.”¹³⁰ He also established the Adair Genetics Association, which was created to raise funds and generate public interest in genetics.¹³¹ Adair’s fascination with genetics was fundamentally driven by eugenics, as evidenced by the conclusion of his 1968 autobiography:

Perhaps eugenics can never become an exact science like genetics. Nevertheless, with the threat of overpopulation that now confronts us, it has seemed to me that serious thought should be given to promoting the survival of those best endowed. Similarly, I believe some thought and investigation should be devoted to limiting the reproduction of the unfit. Any such control poses a knotty problem. But with all the ingenuity that has been shown in increasing our knowledge, and in applying that knowledge, I believe that serious thought should be given to whatever may promote the evolutionary progress of mankind.¹³²

Adair’s interest in eugenics ran deep, and even towards the end of his life, he strongly believed in the eugenic control of reproduction to improve the human race. His continued pursuit in

¹²⁸ Siddhartha Mukherjee, “The Proper Study of Mankind Is Man,” in *The Gene: An Intimate History* (New York: Scribner, 2016), 273–75.

¹²⁹ Adair, *The Country Doctor and the Specialist*, 214.

¹³⁰ Adair, 215.

¹³¹ Kay Loring, “Benefit Set by Genetics Association,” *Chicago Tribune*, April 17, 1964.

¹³² Adair, *The Country Doctor and the Specialist*, 215.

studying eugenics during his retirement suggested that perhaps Adair viewed himself first and foremost as a eugenicist and only secondarily as an obstetrician and maternal welfare activist.

Through the influence of Adair, prenatal care became a tool to advance the eugenicist's agenda in the United States. Although Adair's conception of preconceptional care never became a national movement like prenatal care, it nevertheless provided insight into his eugenic approach towards maternal welfare. Modern prenatal care today is often viewed as a neutral medical service, but tracing its origins to Adair's vision for prenatal care as a means towards "race betterment" suggests that prenatal care is by no means morally neutral, and in fact, carries with it a potentially heavy moral weight. The application of eugenic ideology to prenatal and preconceptional care subjected mothers to the moral decisions of the physician, who Adair believed had the duty to determine the societal value of a mother and her potential offspring. In this way, what may have begun as an effort to deliver a healthy child and keep the mother safe morphed into a technique for furthering reproductive control.

Conclusion

At the crux of the history of prenatal care was the increasing physician control of pregnancy and childbirth, the mounting tension between medicine and public health, and the rising eugenic control of reproduction. Initially the undertaking of public health officials and infant welfare activists in the early 1900s, prenatal care soon came under the control of physicians starting in the 1920s as the AMA became more vocal against government control of medicine. As obstetricians solidified their control over pregnancy and the birthing process thanks to the work and leadership of Fred Adair, prenatal care became a routine and standard part of

obstetrics. However, Adair had a greater vision for prenatal care and advocated for its use as a eugenic tool for the sake of “race betterment.” Prenatal care, though presented as a medical service, was undeniably also a product of its social and political context.

Eugenic influence on reproduction was not limited to prenatal care and has resulted in lasting racial health disparities in the United States. Many scholars have traced reproductive health inequalities that are present in African American communities back to the eugenics movement. For instance, population control policies that targeted poor blacks and the racism of birth control organizers “increased black distrust of the public health system and has fueled black opposition to family planning up to the present time.”¹³³ Similarly, such distrust also existed and likely continues to exist between African American mothers and the obstetrician providing prenatal care. This distrust stems from the history of eugenic veneration of white mothers and the devaluation of “black motherhood” that, according to scholar Dorothy Roberts, “has borne the weight of centuries of disgrace manufactured in both popular culture and academic circles.”¹³⁴ The eugenics movement left a legacy of racial injustice in nearly all aspects of reproduction, and owing to the work and influence of Adair, prenatal care is no exception.

Present-day racial disparities in pregnancy and birth are evidenced by the fact that despite technological innovation such as ultrasound, genetic testing, and electronic fetal heart monitoring, African Americans continue to experience significantly higher maternal and infant mortality rates compared to whites. In the 1980s, after a report by the Institute of Medicine

¹³³ Jael Silliman et al., “African American Women Seed a Movement,” in *Undivided Rights: Women of Color Organize for Reproductive Justice*, Second (Chicago: Haymarket Books, 2016), 60.

¹³⁴ Dorothy E. Roberts, *Killing the Black Body: Race, Reproduction, and the Meaning of Liberty*, Second (New York: Vintage Books, 2016), 21.

identified prenatal care as an effective means of reducing the incidence of low birth weight,¹³⁵ Medicaid programs substantially expanded prenatal care access. Yet, despite a dramatic increase in prenatal care utilization, low birth weight rates continued to rise.¹³⁶ This remains especially true for African American infants who are not only born with low birth weight at a rate twice that of white infants, but also die at double the rate of white infants. This disparity is also present in maternal mortality rates. Since the 1990s, maternal mortality rates in the United States have been trending upward while in every other developed country, maternal mortality has continued to decrease. This rise has disproportionately affected African Americans. Since the early 1900s, as noted by Adair, it was well known that maternal mortality among African Americans were over two times the rates among white Americans.¹³⁷ Today, that difference remains largely unchanged if not worsened with black mothers dying at least three times the rate of white mothers.¹³⁸

For many years, the solution to the problem of racial disparity in pregnancy and birth outcomes has evaded researchers. This may be due to the narrow scope of prenatal care research. For the most part, prenatal care has only been studied from the medical perspective, and while medical advancements have had a beneficial effect on individual women, they are evidently not sufficient. As demonstrated by the history of prenatal care, the social and political forces that characterized the first half of the twentieth century have had just as much of an impact on

¹³⁵ Institute of Medicine Division of Health Promotion and Disease Prevention, *Preventing Low Birthweight* (Washington D.C.: National Academies Press, 1985), 132–49.

¹³⁶ Elizabeth E. Krans and Matthew M. Davis, “Preventing Low Birthweight: 25 Years, Prenatal Risk, and the Failure to Reinvent Prenatal Care,” *American Journal of Obstetrics and Gynecology* 206, no. 5 (May 2012): 398–403.

¹³⁷ Fred Lyman Adair, “Maternal, Fetal, and Neonatal Morbidity and Mortality,” *American Journal of Obstetrics and Gynecology* 29, no. 3 (1935): 384–94.

¹³⁸ Andrea A. Creanga et al., “Pregnancy-Related Mortality in the United States, 2011–2013,” *Obstetrics and Gynecology* 130, no. 2 (August 1, 2017): 366–73.

prenatal care. Perhaps by recognizing that prenatal care originated from the efforts of public health and infant welfare activists, we can begin to develop a more holistic and community-oriented perspective about prenatal care and consider how a woman's social and economic needs impact her pregnancy and birth. Additionally, acknowledging that prenatal care was once used as a eugenic tool for social control should lead us to consider how undoing the deep-seated power dynamics between physician and patient could improve a woman's pregnancy outcome.

Asking different questions and approaching prenatal care from a wider socio-political angle would create space for the reimagination of prenatal care. In recent years, novel models of prenatal care have yielded promising results. For instance, research on the work of doulas (non-medical birth coaches who provide guidance and support to pregnant women before, during, and after birth) has shown that the use of doulas is associated with a significant reduction in the rate of preterm births, especially among African American women.¹³⁹ While the exact reason for this association is unclear, researchers believe that it might partly be due to "the reduction in stress because of the support of a doula during prenatal care."¹⁴⁰ Another example is the group prenatal care model, in which eight to twelve pregnant women meet together regularly for 2-hour long sessions. During each sessions, participating women also receive a one-to-one check-up with a physician. Researchers discovered that women who participated in group prenatal care were significantly less likely to have preterm birth compared to women receiving traditional prenatal care. Notably, a meta-analysis showed that group prenatal care had the greatest impact on

¹³⁹ Katy Backes Kozhimannil et al., "Doula Care, Birth Outcomes, and Costs Among Medicaid Beneficiaries," *American Journal of Public Health* 103, no. 4 (April 2013): 113–21.

¹⁴⁰ Tara Haelle, "Doula Support for Pregnant Women Could Improve Care, Reduce Costs," Radio Broadcast, *Morning Edition* (NPR, January 15, 2016), <https://www.npr.org/sections/health-shots/2016/01/15/463223250/doula-support-for-pregnant-women-could-improve-care-reduce-costs>.

reducing preterm birth among African American women. Again, though the mechanism has yet to be elucidated, many believe that the support systems that develop within a group setting similarly reduce the stress of pregnancy and thus may have a direct impact on reducing preterm birth.¹⁴¹

The discovery that two non-medical interventions – doulas and group prenatal care – may significantly reduce preterm birth particularly among African Americans is an invitation to think differently about prenatal care. Rather than creating additional technological interventions to address pregnancy, these new models of providing prenatal care may be able to alter the patient-physician relationship. Doulas, as non-medical providers, are often seen as a patient advocate and a liaison between the physician and the expectant mother. In group prenatal care, physicians typically serve as a secondary source of advice as women are encouraged to educate one another based on personal experiences. What ties these two novel models of prenatal care together may be the ways they disrupt the physician-patient hierarchy and create therapeutic social support systems.

Adair played a significant role in deepening the physician's power and control over pregnancy and birth through prenatal care. Because of his influence in both professional and public spaces, Adair helped to transform pregnancy and birth from being a female-driven, communal experience to a medically supervised event that also served as a potential means of eugenic control. The consequences of Adair's efforts, especially in promoting eugenics in the context of prenatal care, are still apparent today as evidenced by perpetually higher maternal and infant mortality rates among African Americans compared to whites. Therefore, improving

¹⁴¹ Ebony B. Carter et al., "Group Prenatal Care Compared with Traditional Prenatal Care: A Systematic Review and Meta-Analysis," *Obstetrics and Gynecology* 128, no. 3 (September 2016): 551–61.

prenatal care cannot be done solely through medical innovation and intervention. It also requires a more fundamental change that involves the unraveling of deeply rooted power dynamics and the restoration of power and control over pregnancy and birth to the patient and her community.

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